



Level 1 Validation Certificate

This document verifies that the Level 1 Validation process was completed. The session details and audit review outcomes are included here.

This certificate is required for submission – alongside the Level 1 validated water audit software file – to the California Department of Water Resources.

Call Date: 9/20/2018

Water Supplier

Supplier Name:	City of Fresno
Supplier Participants:	Bud Tickel – Asst. Director of Public Utilities Brock Buche – Asst. Director of Public Utilities Glenn Knapp – Supervising Professional Engineer Christopher Carroll – Water Manager Chad Colby – Water System Supervisor Henry McLaughlin – Water Division Business Manager Christina Fontes – Staff Assistant Charles Masters – Engineer II

Validator

Validator:	Kate Gasner, Water Systems Optimization
Validator Qualifications:	Water Audit Validator Certificate from the AWWA California Nevada Section

Key Audit Metrics

Data Validity Score:	66	
ILI:	3.8	
Real Loss:	44.7	gal / conn / day
Apparent Loss:	10.3	gal / conn / day

Certification Statement by Validator

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit. ☒

Non-Revenue Water as Percent of Cost of Operating System: 7.5%

Level 1 Validation – Water Supplier Confirmation

This document confirms participation in and endorsement of the Level 1 Validation as completed.

This acknowledgement is required for submission – alongside your Level 1 validated water audit software file – to the California Department of Water Resources.

Water Supplier Name: City of Fresno

Water Supplier Public Water System ID: 1010007

Water Audit Period: 1/2018 to 12/2018

Water Audit & Water Loss Improvement Steps

Steps taken in the audit period timeframe to increase data source accuracy, reduce real losses, and/or reduce apparent losses, as informed by the water audit.

Steps taken regarding time period data source accuracy and apparent water losses include real time monitoring and troubleshooting via automatic logging through SCADA, utilization of NO-DES recirculating flushing trucks (no longer flushing to waste), increased testing of small and large meters, and targeting expanded CIP budget for Replacement and Refurbishing of all assets (water mains, well, treatment plants).

Certification Statement by Water Supplier Executive:

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audits and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

Executive Name (print): Glenn A. Knapp, PE

Executive Position: Supervising Professional Engineer – Department of Public Utilities, Planning and Engineering

Signature:



Date

9/30/2019